

## PATENT COOPERATION TREATY



## PCT

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

REC'D 31 OCT 2003

WIPO PCT

Applicant's or agent's file reference P25946PC00/AA/kdu		<b>FOR FURTHER ACTION</b> See Notification of Transmittal of International Preliminary Examination Report (Form PCT/PEAA/16)	
International application No. PCT/EP02/00996	International filing date (day/month/year) 30.01.2002	Priority date (day/month/year) 30.01.2002	
International Patent Classification (IPC) or both national classification and IPC H04B17/00			
Applicant TELEFONAKTIEBOLAGET L M ERICSSON (PUBL) et al.			
<p>1. This International preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of 5 sheets, including this cover sheet.</p> <p><input type="checkbox"/> This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).</p> <p>These annexes consist of a total of sheets.</p>			
<p>3. This report contains indications relating to the following items:</p> <p>I <input checked="" type="checkbox"/> Basis of the opinion</p> <p>II <input type="checkbox"/> Priority</p> <p>III <input type="checkbox"/> Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</p> <p>IV <input type="checkbox"/> Lack of unity of invention</p> <p>V <input checked="" type="checkbox"/> Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</p> <p>VI <input type="checkbox"/> Certain documents cited</p> <p>VII <input type="checkbox"/> Certain defects in the international application</p> <p>VIII <input type="checkbox"/> Certain observations on the international application</p>			
Date of submission of the demand  05.08.2003		Date of completion of this report  29.10.2003	
Name and mailing address of the International preliminary examining authority:  European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465		Authorized Officer  Bodin, C-M  Telephone No. +49 89 2399-8952 	

**INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT**

International application No. **PCT/EP02/00996**

**I. Basis of the report**

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17):*

**Description, Pages**

1-7 as originally filed

**Claims, Numbers**

1-12 as originally filed

**Drawings, Sheets**

1/3-3/3 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).
3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:
- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- ☐ the description, pages:
- ☐ the claims, Nos.:
- ☐ the drawings, sheets:

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5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)).

*(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)*

6. Additional observations, if necessary:

**V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

1. Statement

Novelty (N)	Yes: Claims	1-12
	No: Claims	
Inventive step (IS)	Yes: Claims	1-12
	No: Claims	
Industrial applicability (IA)	Yes: Claims	1-12
	No: Claims	

2. Citations and explanations

**see separate sheet**

Re Item V

**Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

- 1 The document US-A-5 946 622 (=D1) was not cited in the international search report. A copy of the document is appended hereto.
- 2 The document D1 is regarded as being the closest prior art to the subject-matter of claim 4, and discloses (cf. Figure 2 of D1) a transmission system (120) comprising a main coupling device (230) and a network of distributed antennas (130, 160) having a cable (260, 270-300) providing a main transmission path, the main coupling device (230) being suitable for coupling the cable to one or more peripheral devices (205', 205"), each of which being suitable for transmission of one or more carrier signals, whereby the network of antennas is divided into first (130) and second (160) networks providing first (270-300) and second (260) main transmission path parts of the main transmission path respectively, **the network of antennas further comprising** an intermediate coupling device (250) being coupled to the first (270) and second (260) main transmission path parts.
- 3 The feature considered to be new and inventive in view of document D1 relates to the intermediate coupling device **comprising splitter/combiner (31, 32)** adapted to split the first and the second main transmission path parts into a first **(35)** and a second **(36)** group of intermediate paths, respectively, for transmission per group of intermediate paths of different carrier signals over different intermediate transmission paths, the intermediate coupling device **further comprising a switch means (33, 42, 47) arranged to connect** an intermediate path of the second group **alternatively** to an intermediate path of the first group or to a further peripheral device.
- 4 Advantage: An expanding of the system by adding a peripheral device may be performed without putting the system out of operation.

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International application No. PCT/EP02/00996

5 Article 6 PCT:

a) The features introduced **in bold** in sections 2 and 3 above are considered to be necessary clarifications of claim 4 for the following reasons:

a1) The subject-matter of claim 4 should make clear that the intermediate coupling device is part of the network of antennas which in turn is part of the claimed transmission system, thus making clear that the intermediate coupling device is part of the transmission system.

a2) The subject-matter of claim 4 should make clear that the "or" in the last line of claim 4 is not dividing two optional features, but defining two alternative positions of a switching means.

a3) Since claim 4 relates to an apparatus, and not to a method, the features should be defined as apparatus features.

b) Corresponding amendments, except a3), apply to method claim 1.

c) In the claims, "antenna's" should have been replaced by "antennas".

d) The cable referred to in claims 1 and 4 should have been given the reference signs "(17, 18)", and not "(7)".

6 The preamble of claims 1 and 4 should have reflected the features which are disclosed in D1, see above in section 2.

7 Contrary to the requirements of Rule 5.1(a)(ii) PCT, the relevant background art disclosed in the document D1 is not mentioned in the description, nor is this document identified therein.